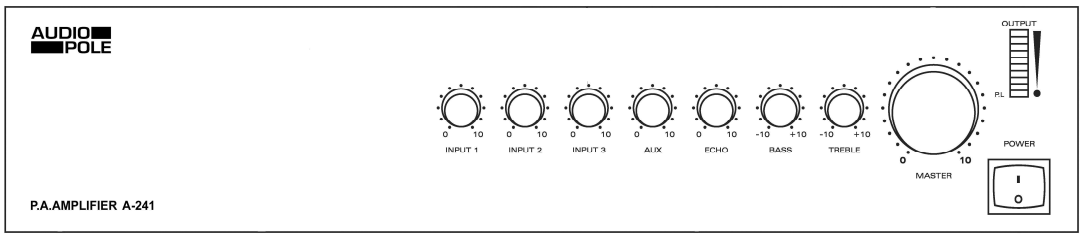
AUDIO POLE

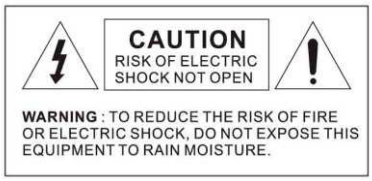
A 241

MIXER AMPLIFIER



USER'S MANUAL

Important Safety Instructions


CAUTION
RISK OF ELECTRIC SHOCK NOT OPEN
WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN MOISTURE.

This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.

This symbol, wherever used, alerts you to important operating and maintenance instructions.

POWER SUPPLY

Ensure that the insource voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

EXTERNAL CONNECTION

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

DO NOT REMOVE ANY COVERS

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only. No user serviceable parts inside.

FUSE

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

PROTECTIVE GROUND

Before turning the unit on, make sure that it is connected to Ground. This is to prevent the risk of electric shock. Never cut internal or external Ground wires. Like wise, never remove Ground wiring from the Protective Ground Terminal.

OPERATING SAFETY INSTRUCTIONS

Read these instructions. Follow all instructions. Keep these instructions. Do not discard. Heed all warnings. Only use attachments/accessories specified by the manufacturer.

POWER CORD AND PLUG

Do not tamper with the power cord or plug. These are designed for your safety. Do not remove Ground connections! If the plug does not fit your AC outlet seek advice from a qualified electrician. Protect the power cord and plug from any physical stress to avoid risk o electric shock. Do not place heavy objects on the power cord. This could cause electric shock or fire.

SERVICING

Refer all servicing to qualified service personnel only. Do not perform any servicing then those instructions contained within this User's Manual.

DISPOSAL

This symbol indicates that the disposal of this product is submitted to local regulations. Please contact your local dealer.

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1 Introduction

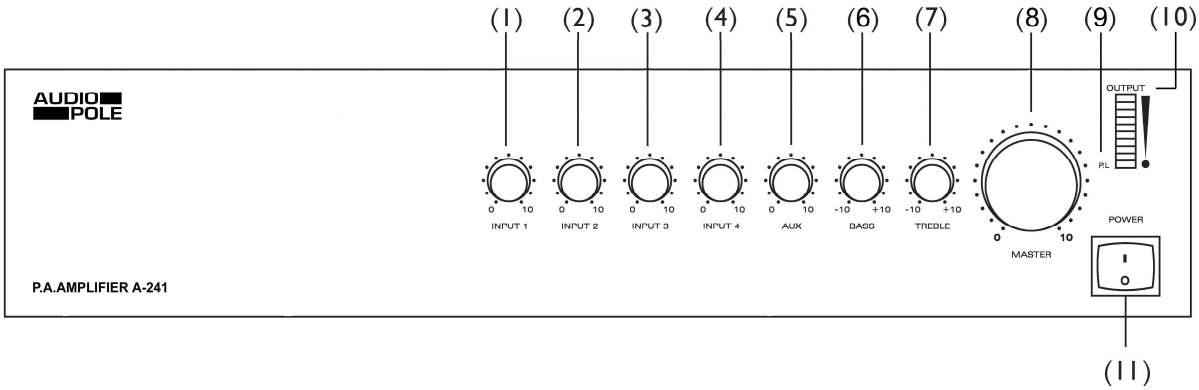
The Audiopole A 241 mixer-amplifier has been specifically designed for commercial applications. It is an ideal solution for bars, restaurants, retail outlets, office buildings, and other applications where paging and background music are required.
The A-241 combines a 240 W amplifier with a five inputs mixer; it is equipped with a priority function where a microphone plugged into input 1 can automatically mute other sound sources just by presence of signal.
This Voice Priority system can be also activated by an additional 600 Ω balanced input connected to an electronic messages device.

2 Features

- 240 W/ 100 V/ 4 Ω,
- 135 W with 24 V DC power supply,
- 100 V, 70 V and 25 V transformer outputs,
- 4 Ω output,
- 4 Mic/Line inputs, 1 stereo Aux input, 1 Tel. input for voice message,
- Screw terminal speaker outputs,
- Two unit rack mount (2U).

3 Controls and Settings

Front



1 - INPUT 1
Volume control of priority input 1.

2 - INPUT 2
Volume control of input 2.

3 - INPUT 3
Volume control of input 3.

4 - INPUT 4
Volume control of input 4.

3 Controls and Settings

5 - AUX
Volume control of AUX input.

6 - BASS
Bass level control (± 10 dB / 100 Hz).

7 – TREBLE
Treble level control (± 10 dB / 10 kHz).

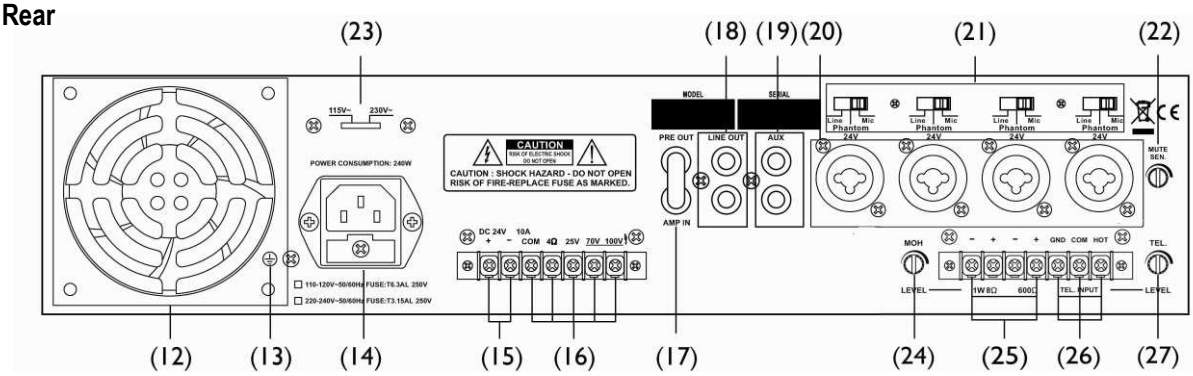
8 - MASTER
Master volume control.

9 - PL
Power supply indicator. The lower Led segment of the display illuminates when the device is switched on.

10 - OUTPUT
The upper 9 Led segments of the display indicate the output level.

11 - POWER
Power switch. When it is operated, Master volume (8) must be set to zero.

Rear



12 - Ventilation
Cooling fan. Do not obstruct the entries and exits of air for the cooling of the device. Any impediment to the free movement of air in the unit may cause a failure not covered by the warranty.

13 - Earth connection
To be connected to a rack chassis in case of hum or background noise.

14 - Power outlet / Fuse
Before any connections make sure that the power cable is not damaged. The connection to the mains supply must have an earth connection. The mains voltage supplied must conform with the electrical characteristics of the device .
The compartment below contains the fuse. In the event of change, it is imperative to use a fuse with identical electrical characteristics at risk of damaging the device.

15 - DC 24 V
Terminals for back up power supply 24 V DC. In the event of main power failures, the DC power takes over automatically. When connecting, observe the correct polarity.

3 Controls and Settings

16 - COM 4Ω / 25V / 70V /100V
Speaker outputs terminals. 4 Ω terminal allows the use of standard speakers. Be careful, do not use loads less than 4 Ω at risk of damaging the device.
The 25 V, 70 V or 100 V position requires speakers equipped with 25 V, 70 V or 100 V line transformers which must be connected in parallel. **The sum of the powers of the speakers must not exceed the nominal power of the amplifier**. For example, it will not be possible to use more than 24 x 10 W speakers.

17 - PREO OUT / AMP IN
Allows the connection to an external processing system (equalizer, etc.). Once the jumper removed, connect the PRE OUT output to the input of the processing unit, then the output of the processing unit to the AMP IN input. The jumper must stay in place if this feature is not used.

18 - LINE OUT
Signal output for external amplifier or recorder.

19 - AUX IN
Auxiliary input for CD or MP3 player.

20 - MIC/LINE inputs 1-2-3-4
XLR / ¼" Jack inputs. Input 1 is the priority input. When the presence of a signal is detected on input 1, inputs 2, 3, 4 and AUX are attenuated. The attenuation sensitivity is controlled by MUTE / SEN (22).

21 - Line / Phantom / Mic
3 positions selector for input signal type. Select "Line" for line level signals, "Mic" for dynamic microphone and "Phantom" for electrets microphones. The Phantom power supply delivers 24 V.

22 - MUTE / SEN
Sensitivity control of priority for input 1 and TEL. (message player).

23 - Mains supply selector
Check the correct voltage before any connection to the mains supply.

24 - MON. LEVEL
Volume of the MONITOR output (25).

25 - 1W 8Ω / 600Ω
Outputs dedicated to monitor AUX input signal:
- terminals 1W 8Ω for a direct connection to a passive speaker, delivering 1 W into a 8 Ω load.
- terminals 600Ω for a connection to an active speaker or amplifier.

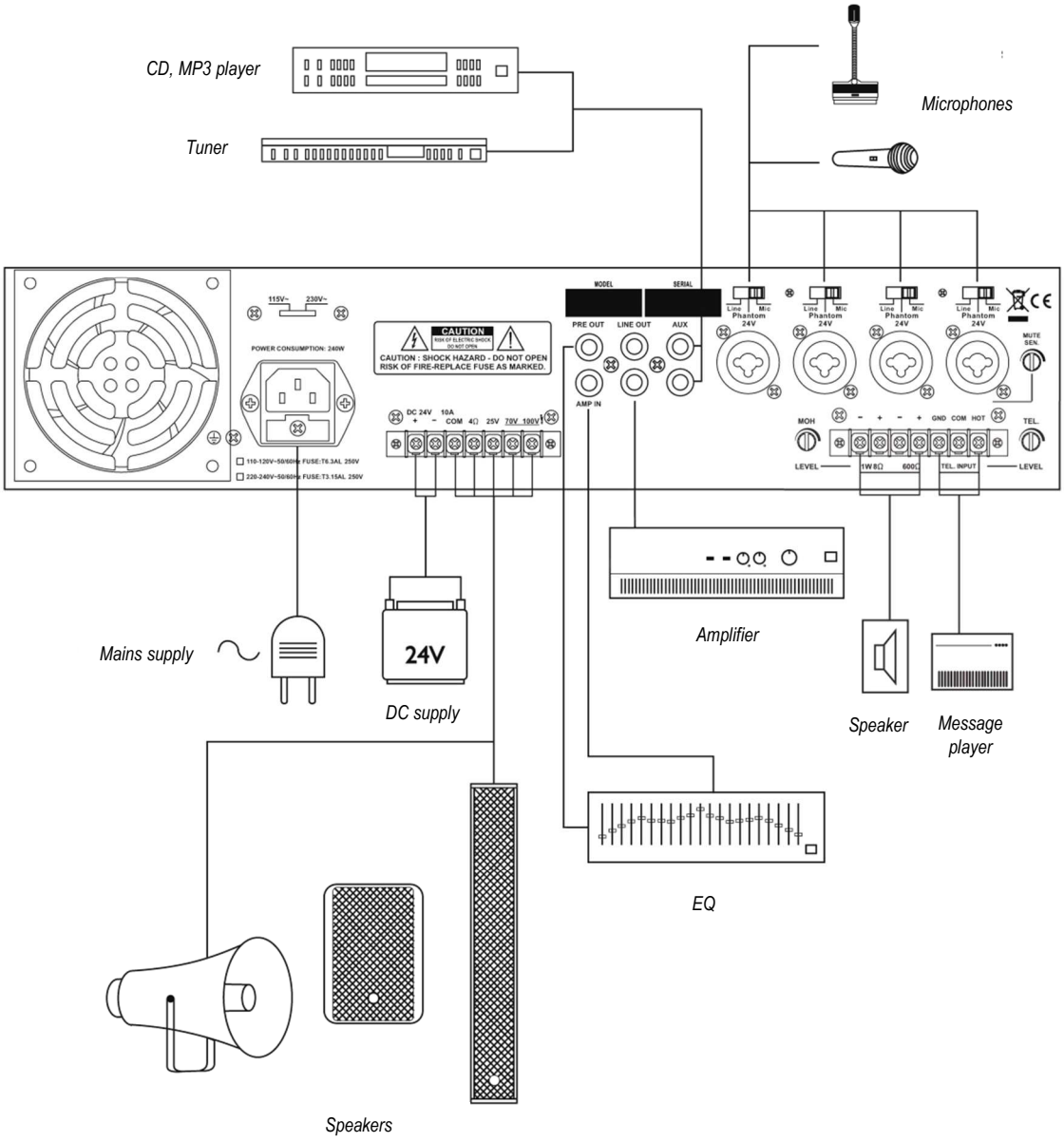
26 - TEL. INPUT
Terminals for a message player. Like input 1, this input has priority over inputs 2, 3, 4 and AUX.
MUTE / SEN (22) can be used for the attenuation sensitivity.

27 - TEL. LEVEL
Input level control of the TEL. INPUT (26).

4 Installations Hints

In case of installation in cabinet or rack, ensure the ventilation requirements. The depth of the unit is 330 mm. The dimensions in height is 2 units Rack (88 mm).
Do not position audio high-gain equipment like preamplifiers or recorders just above or below the amplifier. Despite the protections of the radiation device, magnetic fields can induce hum in unscreened ancillary equipment.
Do not obstruct the entrance and exits of air for the cooling of the device. Any impediment to the free movement of air in the amplifier may cause a failure not covered by the warranty.
The device use in an environment where the air is confined or polluted requires frequent internal cleaning. Smoke and dust particles accumulated inside the appliance may cause failures not covered by the warranty. This cleaning should be done by qualified personnel.
Before any work on the wiring, be sure to turn the volume control knobs fully counterclockwise and turn off the unit.
Use good quality audio cables, **shielded**, for inputs. A balanced or unbalanced connection is feasible.

5 Example



6 Technical Specifications

Output power	240 W 165 W (24 V DC supply)
Frequency response	80-16,000 Hz (± 3 dB)
Total harmonic distortion	< 1% (1 kHz-nominal power capacity)
Signal to noise ratio	INPUT 1-4 Mic & Phantom : > 65 dB, Line : > 75 dB, AUX: > 80 dB
Inputs / sensitivity-impedance	Mic: -52 dBV balanced Phantom: -52 dBV / 24 V balanced Line: -10 dBV balanced AUX IN: -20 dBV unbalanced AMP IN : 0 dBV unbalanced TEL. INPUT: 600 Ω balanced (transformer)
Speaker outputs	
Low impedance	4 Ω
Constant voltage	25 V - 70 V - 100 V
Tone controls	
Bass	± 10 dB - 100 Hz
Treble	± 10 dB - 10 kHz
Additional outputs	REC OUT, PRE OUT / mono RCA jack / 1 V-600 Ω/ unbalanced 1 W / 8 Ω, MONITOR 600 Ω
Controls	Volume INPUT 1-4, AUX IN, MASTER MUTE SENSITIVITY TEL. INPUT MONITOR
Power consumption	600 W (312 W / 24 V DC operation)
Dimension (L x H x D)	420 mm x 88 mm x 330 mm
Weight	12.8 kg
Accessories	19" rack mounting ears

7 Warranty

This device is warranted parts and labor against any manufacturing defects for a period of two years from the date of purchase by the first user.

Conditions

1. The unit has been installed and implemented by observing the safety instructions in this operating manual.
2. The device was not diverted from its destination, either voluntary or accidental, and suffered no deterioration or modification other than those described here or explicitly authorized by AUDIOPOLE.
3. All modifications or repairs have been carried out by an authorized service station.
4. The defective product must be returned with the dealer who made the sale or to an authorized service station with proof of purchase.
5. The device was properly packaged to avoid damage in transport.

AUDIOPOLE

22, rue Édouard Buffard, Z.A.C. de la Charbonnière, Montévrain - 77771 Marne-la-Vallée Cedex 4 - France
Tél : + 33 (0)1 60 54 32 00 - Fax : + 33 (0) 1 60 54 31 90 - www.audiopole-pa.fr